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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,340	10/31/2001	James M. Little	PW 0249736 P12828	5257

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Pillsbury Winthrop LLP
Intellectual Property Group
Suite 2800
725 South Figueroa Street
Los Angeles, CA 90017-5406

EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 02/26/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,340

Applicant(s)

LITTLE, JAMES M.

Examiner

Lawrence B Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 10-12, 14-16 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 9, 13, 17, 18, 20, 21, 23, 24, 26, 27, 29 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-7, 10-12, 14-16, 19, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Rousos et al. (US Patent 3,947,769).

(1) With regard to claim 1, Rousos et al. discloses in Fig. 1, an adaptive slicer threshold generation system, comprising; a first moving average filter (33) to determine a first average value of a first binary signal; a second moving average filter (35) to determine a second average value of a second binary signal; and a combiner (39) to combine the first average value of the first binary signal and the second average value of the second binary signal to generate a combined output (39C).

(2) With regard to claim 2, Rousos et al. also discloses wherein the adaptive slicer threshold generation system further includes a gain element (39) to set a value of a slicer threshold within a data eye.

(3) With regard to claim 3, Rousos et al. also discloses wherein at least one of the first moving average filter and the second average filter includes a leakage element to control an adaptation of the slicer threshold (abstract).

(4) With regard to claim 5, Rousos et al. discloses in Fig. 1, an adaptive slicer threshold generation system, comprising a minimum detector to determine a minimum value of a binary one (35); a peak detector (33) to determine a maximum value of a binary zero;

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and a combiner (39) to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined signal.

(5) With regard to claim 6, claim 6 inherits all limitations of claim 5. Furthermore, Rousos et al. also discloses wherein the adaptive slicer threshold generation system further includes a gain element (39) to set a value of a slicer threshold within a data eye.

(6) With regard to claim 7, Rousos et al. also discloses wherein at least one of the minimum detector and the peak detector filter include a leakage element to control an adaptation of the slicer threshold (abstract).

(7) With regard to claim 10, Rousos et al. also discloses in Fig. 1, a receiver system, comprising; a receiver circuit (10); an antenna (11) coupled to the receiver circuit; an adaptive slicer threshold generation system coupled to the receiver circuit; having a first moving average filter (33) to determine a first average value of a first binary signal, a second moving average filter to determine a first average value of a second binary signal, and a combiner (39) to combine the first binary signal and the second binary signal to generate a combined output (39C).

(8) With regard to claim 11, Rousos et al. also discloses wherein the adaptive slicer threshold generation system further includes a gain element (39) to set a value of a slicer threshold within a data eye.

(9) With regard to claim 12, Rousos et al. also discloses wherein at least one of the first moving average filter and the second average filter includes a leakage element to control an adaptation of the slicer threshold (abstract).

(10) With regard to claim 14, claim 14 inherits all limitations of claims 5 and 10.

(11) With regard to claim 15, claim 15 inherits the limitations of claims 2 and 14, above.

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(12) With regard to claim 16, claim 16 inherits all limitations of claims 7 and 14, above.

(13) With regard to claim 19, claim 19 inherits all limitations of claim 1, since claim 1 teaches the devices and discloses their purposes as disclosed in the method claim of 19.

(14) With regard to claim 22, claim 22 inherits all limitations of claim 5, since claim 5 teaches the devices and discloses their purposes as disclosed in the method claim of 22.

3. Claims 25 and 28 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rousos et al. (US Patent 3,947,769) as applied to claims 19, and 22 above.

(1) With regard to claim 25, as noted above, Rousos et al. discloses all limitations of claim 19 above, which discloses the method taught in claim 25. Though Rousos et al. does not teach a machine-readable storage medium and program-code the examiner takes official notice that it is well known in the art to implement hardware functions through machine-readable storage mediums and program-codes.

(2) With regard to claim 28, as noted above, Rousos et al. discloses all limitations of claim 22 above, which discloses the method taught in claim 28. Though Rousos et al. does not teach a machine-readable storage medium and program-code the examiner takes official notice that it is well known in the art to implement hardware functions through machine-readable storage mediums and program-codes.

Allowable Subject Matter

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4. Claims 4, 8, 9, 13, 17-18, 20-21, 23-24, 26-27, 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 703-305-6969. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw
February 19, 2004


STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600